

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high-pressure burner comprising:
at least one end closure member, and
a discharge vessel that includes at least one end part, and a
discharge cavity,

wherein:

at least one coating layer and a sealant are located and gas-tight connected between the end part of the discharge vessel and the end closure member, wherein the at least one coating layer is located between the discharge vessel and the sealant,

the end closure member includes a feed-through opening for filling the discharge cavity, and

an electrode—a feed-through member that extends through the

feed-through opening and is gas-tight connected to the end closure member.

2. (Previously Presented) The high-pressure burner of claim 1, wherein the gas-tight bonding of the coating layer and the sealant to the discharge vessel and the end closure member is stronger than a direct gas-tight bonding of the sealant to the end closure member and discharge vessel.

3. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer has an expansion coefficient in the range between $4 \cdot 10^{-6}$ K⁻¹ and $12 \cdot 10^{-6}$ K⁻¹.

4. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer is chemically resistant towards oxides and iodides.

5. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer is of a material comprising at least Mo.

6. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer covers the at least one end part.

Claim 7 (Canceled)

8. (Previously Presented) The high-pressure burner of claim 1, wherein a cross-section of the feed-through opening varies along a longitudinal axis of the end closure member.

9. (Currently Amended) An automotive headlamp comprising:
a discharge vessel that includes an end part and a discharge cavity,
an end closure member that includes a feed-through opening for filling the discharge cavity, and
an electrode—a feed-through member that extends through the feed-through opening and is gas-tight sealed to the end closure unit member,
wherein at least one coating layer and sealant are located and

gas-tight connected between the end part of the discharge vessel and the end closure member, and wherein the at least one coating layer is located between the discharge vessel and the sealant.

10. (Currently Amended) A method of manufacturing a gas-tight high-pressure burner that includes an end closure member, a feed-through-electrode member, and a discharge vessel, comprising:

coating at least one of the end closure member and the discharge vessel with a coating layer,

gas-tight connecting the end closure member to the discharge vessel using a sealant, wherein the coating layer is located between the discharge vessel and the sealant,

filling the discharge vessel with an ionisable filling through a feed-through opening in the end closure member, and

closing the feed-through opening by inserting the feed-through electrode-member through the feed-through opening and gas-tight connecting the feed-through electrode-member to the end closure device member.

11. (Currently Amended) A headlight suitable for use in a motor vehicle comprising:

a lamp that includes a gas-tight high-pressure burner,

the burner including:

at least one metal halide discharge vessel that includes at least one end part and a discharge cavity;

at least one end closure member;

at least one sealant between the end closure member and the end part;

at least one feed-through opening in the end closure member for high-pressure filling the discharge cavity,

at least one feed-through electrode-member that extends through the feed-through opening and seals the feed-through opening via a gas-tight connection to the end closure member; and

at least one gas-tight connected coating layer covering one or more of the end part of the discharge vessel ~~and the end closure device, wherein the coating layer is located between the discharge vessel and the~~ and the at least one sealant, gas-tight bonding of the end closure member and the discharge vessel via the coating

being stronger than gas-tight bonding of the end closure member and the discharge vessel via the sealant.

12. (Previously Presented) The headlight of claim 11 wherein the coating layer has an expansion coefficient in the range between $4 \cdot 10^{-6}$ K⁻¹ and $12 \cdot 10^{-6}$ K⁻¹. for temperatures in the range 298 K to 2174 K.

13. (Previously Presented) The headlight of claim 11 wherein the coating layer is chemically resistant towards oxides and iodides.

14. (Previously Presented) The headlight of claim 11 wherein the coating layer comprises a material selected from the group comprising at least W, Mo, and/or Pt.

15. (Currently Amended) The headlight of claim 11, wherein the sealant and the electrode at least one feed-through member comprise materials that are needed for welding, laser welding, resistance

welding, soldering, brazing, bonding with adhesive materials, primary shaping, sintering, sealing or any combination thereof.

16. (Currently Amended) The headlight of claim 11, wherein the electrode—at least one feed-through member is introduced into the feed-through opening after the discharge vessel is filled.

17. (Previously Presented) The headlight of claim 16, wherein the feed-through opening has an outer cross section area and an inner cross section area nearer the discharge cavity, and the outer cross section area is greater than or equal to the inner cross section area.

18. (Currently Amended) The headlight of claim 11, wherein the end closure device—member is made of a functionally graded cermet material including first and second materials denominated A and B arranged such that, in select portions, concentration of compound A substantially increases where component B decreases causing gradients of both A and B, while an outer layer of the end closure

has a constant concentration of A and B.

19. (Previously Presented) The headlight of claim 18, wherein compound A comprises Al₂O₃ and compound B comprises Mo.

Claim 20 (Canceled)

21. (Currently Amended) A method of assembling a lamp comprising:

first sealing at least one cap to a discharge vessel, the cap comprising an opening, the sealing process comprising increasing temperature and/or pressure within the vessel and using a sealant and a coating, wherein the coating is located between the discharge vessel and the sealant;

after sealing, filling the vessel with at least one desired salt and/or at least one desired filling gas, through the opening;

positioning at least one electrode-feed-through member in the opening after the vessel is filled, such that the electrode-at least one feed-through member extends through the opening and into

the discharge vessel; and

second sealing the electrode at least one feed-through member in the opening using a technique resulting in substantially less temperature and pressure increase within the vessel than was required by the first sealing, so that the sealing and coating from the first sealing are not damaged by temperature and pressure from contents of the vessel.

22. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer is of a material comprising at least Pt.

23. (Previously Presented) The high-pressure burner of claim 1, wherein the coating layer is of a material comprising at least W.